

METHOD OF POLISHING UNEVEN SURFACE OF SEMICONDUCTOR SUBSTRATE

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PURPOSE: To enable the polish stop to improve the efficiency and cost effect at manufacturing of semiconductors by forming an uneven surface layer on an oxidized boron nitride polish stop layer and polishing the uneven surface layer to a depth reaching the stop layer.

CONSTITUTION: On a semiconductor substrate 10 an oxidized boron nitride polish stop layer 16' is provided and an uneven surface layer 22 to be selectively polished to the layer 16' is formed thereon and polished unto reaching the stop layer 16'. A gate structure 18 having a boron nitride layer at the top is e.g. formed the substrate 10 and oxidized to form an oxidized boron nitride layer 16', an insulation layer 22 is formed thereon through a nitride barrier film 20, and planarized, together with the barrier film 20 up to the top of the gate structure 18, using the chemical-mechanical polishing.

